# Carrier Selection on Private Exchanges

Understanding the Impact of Price and Incumbency in a Multi-carrier Exchange Environment

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# Executive Summary

A key advantage of private exchanges is to provide benefits consumers with greater choice – both in products and plans, and, depending on the type of exchange, carriers. Previously, Liazon has uncovered insights into plan choice, based on years of providing private exchanges to clients from a wide range of industries, sizes, and locations.[1] In this paper, we turn our attentions toward carrier choice in a multi-carrier exchange environment. This analysis will help brokers and carriers better understand the impact that pricing adjustments can have on a carrier's market share vis-á-vis the competition within each market.

Specifically, we set out to understand:

## What factors influence employees' selections when given a choice of carriers on a private exchange?

What we learned:

Incumbency (the carrier was the previous provider of health insurance for the company's employees in the year prior to using the exchange) plays a major role in a carrier's ability to gain market share over non-incumbents. If prices were equal, and there was no incumbent, chance would ascribe 25% market share to each provider, assuming a choice of four providers. **If, however, one is the incumbent carrier, it would have, on average, an advantage of 37 percentage points in market share over non-incumbents.** In other words, if there is an incumbent, that carrier would start with 37% market share; each of the four carriers would take one-fourth of the remainder due to chance. Thus, the incumbent can expect to end up with 53% market share (37% + one-fourth of the 63% remainder). The non-incumbents can each expect 16% market share (one-fourth of 63%).

Price is negatively correlated with market share (i.e., the higher the price, the lower the market share a carrier can expect to receive) in accordance with the basic theory of supply and demand. Interestingly, our findings suggest that there is a high level of consumer sensitivity to price, meaning a small shift in price upwards could yield a disproportionate loss in market share. **If a carrier's annual price is 1% higher than the average price, it can expect to lose, on average, 3.5 percentage points in market share**, demonstrating the highly elastic nature of demand in response to price.

Depending on whether or not a carrier is incumbent, different strategies can be pursued in order to gain market share or maximize profitability. Carriers would be well advised to invest in customer service, brand recognition, network quality, product innovation, etc. if they want to differentiate themselves on factors other than price.

[1] Liazon Whitepaper, "Private Exchanges: Data Illustrating the Impact of a Retail Shopping Experience Aided by Decision Support and Education Tools," July 2013

# Introduction

More employers are evaluating single- versus multi-carrier options as they consider what type of private exchange to offer their employees. For larger employers with several thousand employees, multi-carrier exchanges can be an attractive solution to help them optimize their rates with carriers across different geographic regions where their workforce might be located, as well as provide their employees with a wider range of choice.

Previous research in the industry has focused primarily on plan choice; here, we offer one of the first forays into understanding how carrier choice may also play a role in the decisions consumers make in an exchange environment. Our intention is to gather learnings while exchange adoption is still relatively new, in order to lend insight and guidance into shaping its growth path for brokers, carriers, providers, and employers.

This study examines the degree to which carrier familiarity, or "incumbency," as well as price, come into play when employees are presented with a choice of more than one carrier through a private exchange.

Specifically, our purpose is to answer the following questions:

To what extent does a pre-existing relationship with a carrier, or incumbency, have the potential to impact consumer choice of medical insurance in an employer-sponsored plan, assuming all other things are equal?

To what extent does price (i.e., premium) affect consumer choice of a medical insurance carrier in an employer-sponsored plan, all other things being equal?

The insights garnered through this analysis promise to have value not just for the benefits industry, but for behavioral scientists, economists, and thought leaders in consumer behavior and decision making.

# Approach/Methodology

To study the impact of price and incumbency on carrier choice, data were collected from nine employers who have implemented a private exchange, each with an employee group size between 3,000 - 16,000. Average enrolled group size was ~8,000, not including employees who waived medical coverage. Employees of each company were able to choose among four carriers across a number of markets throughout the U.S. (with the exception of a few markets in which there was a choice of five carriers).

Multivariate regression analysis was used to estimate the impact of "price" and "incumbency" on the market share achieved by carriers in the markets examined. (See Appendix for model specifics.)

All nine clients used a traditional benefits administration system in the year prior to this analysis and were therefore new to a private exchange methodology.

The details below provide further context for our analysis:

## Markets

Each of the nine employers analyzed had employees in multiple markets throughout the country. (Note: Markets with <100 employees were excluded from the analytical dataset to reduce potential distortions from small populations.)

## Carriers

In most of the markets, employees had a choice of plans from the following carriers, with one being designated as the "incumbent" for each company:

- Aetna
- Anthem/Blue Cross Blue Shield
- Cigna
- UnitedHealthcare

## Price (Premiums)

Premiums for each carrier in each market reflect the impact of overall medical costs and discounts negotiated by each carrier. Total premium costs were shown to the employees so that their choices would reflect full knowledge of the costs of the plans, not just their share toward it.

Premiums varied based on 4 factors:

1. Location (Market)[2]
2. Carrier (See above for choices)
3. Plan Design/Actuarial Value Bands
4. Coverage Tier (Employee Only, Employee + Spouse/Domestic Partner, Employee + Family, Employee + Children)

In this analysis, we only assessed the impact of the second factor, "Carrier" in relation to pricing, holding the other three factors constant within each observation.

[2] Note: The country was divided into ~50 health care markets, reflecting underlying differences in medical cost structure.

# Summary of Findings

Our analysis found that a simple regression model which only considers price and incumbency can explain most of the variance in market share (see Appendix for R-squared values and percentage outcomes). Adding more variables to the equation is likely to, at best, have marginal impact on the predictive power of the model as up to 89% of the variance was explained.

CONSIDERATIONS TO TEST

## Impact of Incumbency

FINDINGS

- Incumbency is an advantage and tends to increase market share (as supported by a positive correlation of the "Incumbency Variable" - $Var_1$).
- *If prices were equal*, **an incumbent would have an advantage of 37 percentage points in market share over non-incumbents, on average.** The observed variation in incumbency advantage ranges from 24-49% of market share.
    - If there is no incumbent in a market, chance would ascribe 25% to each carrier (assuming four carriers).
    - If there is an incumbent, that carrier would start with 37% market share; each of the four carriers would take one-fourth of the remainder. Thus, the incumbent can expect to end up with 53% market share (37% + one-fourth of the 63% remainder). The non-incumbents can each expect 16% market share (one-fourth of 63%).

## Impact of Price

- As expected, market share is negatively correlated with price, i.e., the higher the price, the lower the market share.
- However, the high level of consumer-sensitivity to price is noteworthy: Our study showed that **if a carrier's annual price is 1% higher than the average of all prices in the market, it can expect to lose 3.5 percentage points in market share, on average.** The observed variation of price elasticity ranges from 2.4-5.3% market share.

## Consistency Across Employers

- While the regression equation for each case is different, and in spite of differences in group characteristics (e.g., demographics, geographic distribution, type of employees), the high R-squared for each employer (between 65-89%) indicates the findings are relatively consistent.
- As further supporting evidence, we see a high R-squared (74%) even when we combine data for the nine employers, suggesting that **the relationships between market share, price and incumbency can be generalized to a wider range of employer populations and may be predictive of market share for future clients.**

# Implications

The results of this study show that price and incumbency are two strong indicators of consumer selection of a medical plan in a multi-carrier environment.

## Incumbency

The need for more research into the effect of incumbency is documented in a 2008 article in *Harvard Business Review*, "The Incumbent's Advantage." The article makes a strong case for incumbency being a powerful tool for increasing market share, and that failing to capitalize on it invites "competitive disruption".

The article goes on to suggest that the way for an incumbent seller in any industry to maintain its advantage over the competition is to use "customer research to plumb the needs of its key segments and then build resource-investment programs to serve them".[3]

Therefore, it stands to reason that the incumbent carrier in a market can use its incumbency to its advantage when pursuing market share. Possible "resource-investment programs" for carriers to distinguish themselves in customers' minds in the months leading up to and during open enrollment may include:

- Greater attention to customer service
- Special notices of network or product changes or enhancements
- Targeted communications to customers showing appreciation for their business
- Promotional campaigns to further name recognition

### What Factors Influence Incumbency?

We recognize that there are many factors that may account for the preference of incumbency and the degree to which they are at play in this analysis have not been studied. Rather, the collective drivers of "incumbency advantage" (regardless of why one consumer may prefer an incumbent insurer over another) is what we are considering.

Factors that may influence the choice of, or aversion to, a particular incumbent for individual users may be:

#### Fear of Change

The psychological impact of not knowing what lies ahead, or feeling overwhelmed about "insurance" can lead to feeling safe with the status quo, i.e., *I know what I already have and I don't want to end up with something worse.*

#### Brand or Name Recognition

Familiarity or knowledge of an existing carrier may create favorable feelings over and above any product specifics. For example, a carrier may be known for better customer service or community efforts. This familiarity may be based on prior experience or absorption of advertising/marketing campaigns.

#### Inertia

Lack of interest or not understanding the importance of these types of decisions can lead the consumer to make the easiest and quickest decision.

#### Provider network

A provider or facility that the consumer wishes to continue using can lead them to stick with the same carrier.

[3] Ian MacMillan and Larry Selden, "The Incumbent's Advantage," *Harvard Business Review*, Oct. 2008

Conversely, the non-incumbent carrier may need to work against the incumbent's advantage to lure these same customers away from their current carrier with marketing campaigns targeted to first-time users.

Further, this research only yields insights for comparing an employer's first year on the exchange versus the previous year without one. In Year 2, presumably, all of the carriers will be incumbents to at least a portion of the population, and non-incumbents for others. Therefore incumbency should be considered on an individual level in Year 2, versus the group level in Year 1. It would be interesting to study the evolution of incumbency advantage in Year 2 and beyond, as consumers become more comfortable with the exchange experience.

## Price

Carriers can use this work to help establish pricing that will enable them to become and remain competitive, both as the incumbent or as a new entrant in a market.

- Incumbents are better positioned to leverage pricing as a tool for maximizing market share or profitability with a starting point of ~53% market share at average price. If they price aggressively (i.e., lower than new entrants), they can cement their incumbent advantage and capture a dominant market share. Or, they can charge up to 8% more than average and still retain a "fair" market share (~25%) while maximizing profitability.
- Non-incumbents, starting from ~16% market share will have less flexibility and must price ~3% lower than average simply to realize a 25% market share.

Brokers, too, will need to consider the implications of price and incumbency when developing premium-equivalent rates for their self-insured clients.

### Questions for Further Research

Further research may be warranted to address the following:

- **What are the factors driving sensitivities to incumbency and price** between different employers (i.e., the range of incumbency and pricing impacts observed)?
- **How do demographics, psychographics, and geographic variations** affect carrier choice (i.e., is a higher income population less sensitive to price)?
- **What additional factors (beyond price and incumbency)** may explain the remaining variance (~26%) found in our model?
- **What influences incumbency** (i.e., to what extent is inertia driving incumbent choice vs. brand recognition vs. other factors)?
- **How do consumers decide between carriers on the public exchanges**, which may have anywhere from 2 to 16 carriers to choose from?[4]
- **What do results look like over time as exchanges gain more traction**, versus our base-level findings (i.e., year-over-year analyses)?

[4] Edmund F. Haislmaier, "Health Insurers' Decisions on Exchange Participation: Obamacare's Leading Indicators," *The Heritage Foundation*, Nov. 2013

# Conclusion

Both incumbency and price have a significant impact on consumers' choice of a carrier in a private exchange environment.

A pre-existing relationship with a carrier has the potential to impact the consumer's choice of a health insurance provider. Consumers are more likely to choose their existing health insurance provider, other things being equal.

As private exchanges shift control over benefits decisions from employers to employees, price sensitivity becomes even more apparent and the transparency offered through private exchanges can amplify its impact. Individual employees can change carriers with greater ease through a private exchange, whereas employers have more in the way of "switching costs". For larger employers in particular, moving thousands of employees from one carrier to another would require a larger cost-savings benefit to make it an attractive consideration. Therefore, the transparency, choice, and ease of shopping in a multi-carrier exchange environment result in small variations in price leading to a disproportionate gain/loss in carrier market share, relative to when employers are the purchasers.

Carriers and employers would be well advised to take this price sensitivity into account when pricing medical plans. Developing brand awareness with the end consumer and value-added services will help carriers differentiate on variables other than price.

Employees should be provided with tools and education to help them consider their full benefits offering, and not choose plans based on the premium amount alone. Once employees understand the bigger picture and the importance of the decision, they can be empowered to make smarter choices for themselves and their families.

Now more than ever, private exchanges are helping to create an environment that is more market-driven, one in which the more transparency and choice consumers have, the more influence they can ultimately yield.

# Appendix

## Data Preparation

1. First, each employer group was analyzed separately and the impact of price and incumbency was determined for that group.[5]
2. Next, we combined the data for all nine employers and the impact of price and incumbency was determined for the whole population.

   The regression model was operationalized as follows:

   Market Share =
   Intercept + $Var_1$ * (Incumbency) +
   $Var_2$ * (Carrier Price/Average Price)

3. "Market Share", "Carrier Price/Average Price" and "Incumbency" were calculated from the available data.
4. Using multivariate regression, we can derive the values of $Var_1$ and $Var_2$ to quantify the impact of price and incumbency.
5. Further, we can look at $R_2$ to understand how much of the variance in market share can be explained by the regression model.

## Variables

### Dependent Variable:

- "Market Share" Outcome (Y Variable) is the outcome that requires explanation; i.e., *What are the drivers of market share?*
- Market share for each carrier within each market is calculated as the percentage of employees in that market who chose that particular carrier.

### Explanatory Variables:

($Var_1$) Incumbency:

- If a carrier was the incumbent carrier, the value of this variable is 1. Otherwise the value is zero.

($Var_2$) Price:

- Price of "Employee Only" tier in the most popular plan design (actuarial value band) is taken as a proxy for the variable "Carrier Price" in each market.[6]
- The ratio "Carrier Price/Average Price" is used as the "Price" variable in each market for each carrier. "Average Price" is the average of the prices of all carriers in that market.

[5] Three of the employer groups analyzed used an exchange with recommendation logic designed to minimize employees' total costs – including premiums, copays, coinsurance, and the likelihood of getting sick (i.e., probability of utilization) – so that the most cost-effective option for each individual is recommended. In this analysis, we do not separate the impact of recommendation logic from consumers' price preferences.

[6] Prices for different plan designs (actuarial value bands) and coverage tiers ("Employee Only, "Employee + Family," etc.) were different. However, the pricing slopes between plans and tiers were largely similar for all carriers. Therefore, any possible impact of minor variations in pricing of different plan designs and tiers are not considered.

## Analysis and Results

As demonstrated below, high values of R-squared (from 65-89%) indicate that a simple regression model that only considers price and incumbency can explain most of the variance in market share among carriers. Adding more variables to the equation is likely to, at best, have marginal impact on the predictive power of the model.

### All nine employers:

Market Share = 3.6 + 0.37 * (Incumbency) - 3.45 (Carrier Price/Average Price)

| | Variables for Regression | N | $R^2$ | Intercept | $Var_1$ (Incumbency factor) | $Var_2$ (Price factor) |
|---|---|---|---|---|---|---|
| Emp. 1 | Incumbency Variable, Carrier Price/Average Price | 63 | 78% | 3.95 | 0.46 | -3.81 |
| Emp. 2 | | 28 | 75% | 4.97 | 0.42 | -4.83 |
| Emp. 3 | | 20 | 65% | 2.61 | 0.28 | -2.43 |
| Emp. 4 | | 112 | 89% | 2.50 | 0.49 | -2.38 |
| Emp. 5 | | 87 | 76% | 4.22 | 0.42 | -4.08 |
| Emp. 6 | | 108 | 80% | 3.79 | 0.24 | -3.60 |
| Emp. 7 | | 64 | 73% | 3.84 | 0.29 | -3.67 |
| Emp. 8 | | 72 | 78% | 5.45 | 0.44 | -5.31 |
| Emp. 9 | | 68 | 77% | 3.98 | 0.30 | -3.81 |
| All 9 Employers | Incumbency Variable, Carrier Price/Average Price | 622 | 74% | 3.61 | 0.37 | -3.45 |
| Minimum | | | 65% | 2.50 | 0.24 | -5.31 |
| Maximum | | | 89% | 5.45 | 0.49 | -2.38 |

### Notes:

"N" is the number of observations (data points) for regression. Each carrier/market pair constitutes one observation.

"$R^2$" represents the percent of variance explained in our model, i.e., 65-89% of the variance in carrier choice can be accounted for by premium price or whether or not the carrier was incumbent in the market.

"$Var_1$" is the explanatory variable representing Incumbency.

"$Var_2$" is the explanatory variable representing Price.